RESEARCH &TECHNOLOGY RESEARCH &TECHNOLOGY

JULY 1999



U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHW

SAFETY

FHWA Supports ITS Deployment Analysis System

HWA's Office of Operations R&D has contracted with the Oak Ridge National Laboratory to create the Intelligent Transportation System (ITS) Deployment Analysis System (IDAS). This new software calculates the relative costs and benefits of potential ITS investments before they are implemented.

IDAS incorporates a cost module, a benefit module, and an internal travel demand model to generate cost/benefit comparisons for alternative ITS deployment scenarios. It uses the output from an existing transportation planning model to establish a base case scenario on which the user can deploy ITS services on specific links in the regional transportation network model.

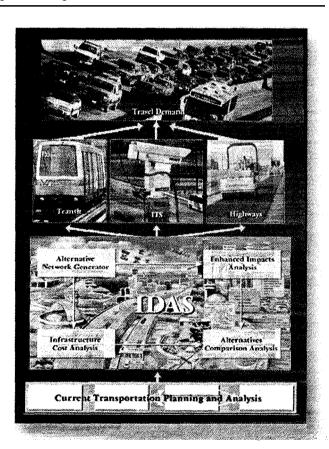
A prototype of IDAS is being rapidly created using metropolitan planning organizations (MPOs) from Chicago, Miami, San Francisco, and Tucson as beta testers. In addition, a steering committee comprised of representatives from a dozen MPOs, the research community, and the U.S. DOT has been active in the development of

IDAS since its inception. The software is currently in the prototype stage with final delivery scheduled for the end of the year.

Transportation planners, who evaluate alternative transportation improvement projects, are currently well equipped to assess the benefits of "traditional" transportation improvements (e.g., adding a lane of highway). However, when it comes to the deployment of relatively new ITS services, they

need a
tool to
assist
them in
their analyses.

IDAS is being developed for use by regional transportation planning organizations, such as MPOs, to support their deployment of ITS services.



IDAS software can be used to calculate relative costs and benefits before potential ITS investments are implemented.

For additional information, please see the IDAS website at www-cta.ornl.gov/cta/research/idas/index. htm.

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TRANSPORTER

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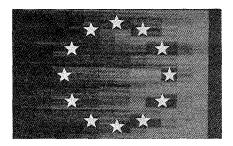
INTERNATIONAL

European Union Invites U.S. Highway Research **Cooperation**

s the European Union (EU) embarks on its Fifth Framework Program for Research, Technological Development, and Demonstration, it has-for the first time-invited institutions from the United States to participate as research partners. By participating with the EU on projects in which both Europe and the United States are interested. The two parties can benefit by combining resources for research and avoiding duplicative research.

In early May, Ivar Schacke, Executive Committee Chairman for the Forum of European National Highway Research Laboratories (FEHRL), met with FHWA and private sector representatives to outline the areas of potential cooperation. European-U.S. collaboration on research has some precedence, particularly under the SHRP program. Under the Fifth Framework Program, U.S. public or private research organizations can participate as self-funded partners in European-lead consortia. The consortia bid for the right to perform research as outlined in the EU's calls for proposals. The EU periodically announces calls for particular research tasks. The December 1999 call will cover many highwayrelated tasks. The Fifth Framework Program and its procedures are described in the EU's Community Research and Development Information Service (CORDIS) website: www.cordis.lu.

During the May meetings, several



research areas were defined by the United States and European parties as potential areas of collaboration. FHWA suggested a number of U.S. research topics in which European input would be welcome, including crash test procedures for roadside equipment, interactive geometric safety design software, nondestructive testing, safety and human factors aspects of in-vehicle information systems, ITS computer models and simulations of bicyclists and pedestrians in traffic, and sensor technologies. Schacke agreed to explore these topics with his FEHRL colleagues.

On the European side, Schacke identified upcoming FEHRL research initiatives in which U.S. input is invited, including maintenance techniques for new pavement types, optimization of maintenance techniques, roadvehicle interaction, innovative maintenance, and maintenance to reduce road closures. FEHRL expects to identify further initiatives, including safety topics, for possible collaboration in the near future.

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TECHNOLOGY TRANSFER

"Getting Our Message Out" Video Now Available

dynamic video is now available from the Research and Technology Service Group that presents methods and practices on the most effective ways to publicize your transportation message.

This video was shown at the opening session of the FHWA co-sponsored symposium, "Getting Our Message Out:

Elevating Public Awareness of Transportation Issues." More than 300 transportation professionals met in Alexandria, VA, on December 3 and 4, 1998, to attend the symposium. The event emphasized that transportation professionals should find ways to be more proactive in communicating with the public, rather than just responding when transportation is interrupted by construction

projects, accidents, or natural disasters.

To obtain your free copy of this video, contact the FHWA Research and Technology Report Center at (301) 577-0818. Copies are limited and will be available on a first-come. first-served basis.

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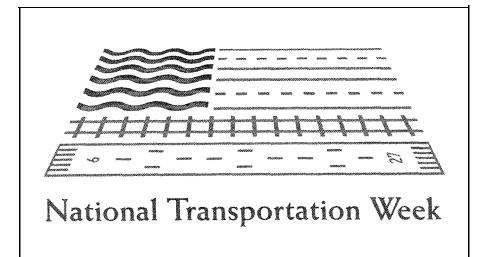
More than 300 transportation professionals at the conference viewed **FHWA's** video presenting methods and practices on the most effective ways to publicize transportation messages.

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National Transportation Week Reaches Out

he Nation celebrated
National Transportation
Week (NTW) from May 16
through 22 by holding events and
displaying exhibits. The main
objectives of the events, according
to NTW's Honorary Chair David
L. Winstead, were to "provide
information so the public can
make informed decisions on
transportation issues, and
encourage careers in transportation-especially for youth."

In honor of NTW, Secretary Slater hosted a Leadership Roundtable at Cleveland State University. The central topic of the roundtable discussions was ensuring a skilled transportation workforce for the next millennium. Participants from several transportation-related industries told the Secretary that they were having difficulty recruiting qualified new employees for both professional



and blue-collar jobs. "If we enter the 21st century with a 20th century work force, we cannot sustain the economic prosperity we now enjoy," the Secretary reiterated. He noted that the goal of DOT's Garrett A. Morgan Technology and Transportation Futures Program is to inspire a million students to consider careers in transportation so that the nation will have the skilled work-force needed in the 21st century.

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Some Particular Events from NTW

Students from Cardozo High School in Washington, DC, observed the latest developments in transportation at FHWA's Turner-Fairbank Highway Research Center (TFHRC), in McLean, VA. They toured labs where researchers conduct work on topics such as photometrics and visibility, traffic management, human factors, and pavement design. The students also viewed a

geotechnically reinforced soil abutment project that features a bridge support composed of granular fill and fabric.

More than five hundred students from Rose Valley Elementary School in Fort Washington, MD, visited 20 different aircraft at Potomac Airport and learned about air controllers' jobs. "It was a real eye-opener for the kids and

their parents," said assistant principal Georgette Gregory.
"Everybody kept commenting about how many women pilots and other women were involved in transportation, so the lesson the kids learned was that this is not just a man's field. Another thing that all the speakers underscored was that the kids need all that math and science to be able to get up there."

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NHI Training Update

First 20 NHI Instructors Certified

The National Highway Institute is proud to present the list of the first 20 "Certified **NHI** Instructors." The six-months-old instructor certification program is designed to ensure consistent instructional quality and encourage the use of "learner-centered" training methods particularly suitable for adult learners. **NHI** expects to have all its instructors certified within three years.

To celebrate this important milestone, **NHI** wants to publish the names of its newly-certified instructors, called "champions of professional development" by Joseph S. Toole, the director of **FHWA's** Office of Professional Development (OPD). Here are the first 20 champions:

Daniel P. Adley, KTA Tater, Pittsburgh, PA

Brenda F. Armstead, FHWA Headquarters, Office of Civil Rights

Larry Arneson, FHWA, Western Resource Center,

John Ballantyne, FHWA, Kentucky Division Office

Jerry DiMaggio, FHWA Headquarters, Office of Bridge Technology

Gary Euler, PB Farradyne, Rockville, MD

Bill Fitzgerald, Eastern Resource Center

Pat Hannigan, Goble Rausche Likens & Associates, Arlington heights, IL

Raymond A. Hartle, Michael Baker, Jr., Inc, Coraopolis, PA

Tom Horan, PB Farradyne, Glenmont, CA

Joseph Krolak, Greenhorne & 0 'Mara, Greenbelt, MD

Dennis D. Lee, FHWA Midwestern Resource Center

Steve Lockwood PB Farradyne, Rockville, MD

Pamela P. Marston, FHWA/FTA Los Angeles Metropolitan Office

Humberto Martinez, FHWA, Office of Civil Rights, Fort Worth, Texas

Johnny Morris, Owen Ayres & Associates, Fort Collins, CO

Dick Powers, FHWA Headquarters, Office of Highway Safety Infrastructure

John Tidwell, University of Tennessee Transportation Center

Steven Toillion, FHWA Midwestern Resource Center

Arlo Waddoups, FHWA, Western Resource Center

To learn more about the Instructor certification Program, please check the next issue if the <u>Transporter</u>, visit NHI's Web site, or contact NHI's Instructor Certification Program Manager Ilse van Goth at (703) 2350529, <u>ilse.vangoth@fhwa.dot.gov</u>

NHI's Instructor Certification Program Wins Praise

he National Highway
Institute's Instructor
Certification program, which
started last fall, has won widespread praise and support from
participating instructors. More
than 20 instructors have already
been certified and a dozen more
are scheduled to be observed for
certification by NHI's "master
trainers" in the next few months.

"I started sort of skeptical about anything that has something to do with the development and presentation of course material," said one of the newly-certified instructors, Steve Lockwood from I? B. Farradyne. "The NHI staff showed me that there is much to be gained in combining technical presentation with hands-on adult learning methods."

The main goal of the program is to ensure consistent instructional quality and to encourage the instructors to use "learner-centered" training methods particularly suitable for adult learners. As NHI's Instructor Certification Program Manager Ilse van Goth explained, "Adult learners prefer learning experiences that match real-world conditions. They learn faster when they can utilize what they already know."

To be certified, each instructor is observed during a classroom presentation by a master trainer who evaluates his or her ability to use such interactive methods as group discussion, problem solving, and team exercises. The required competencies are selected from a national set of competencies prepared by the American Society

of Training and Development. If the instructor demonstrates these skills, he or she will be certified. If there are improvement opportunities, the master trainer will discuss those with the instructor, and together they will work out a development plan. When the instructor is ready to be observed again, he or she will notify NHI, and the process continues.

NHI expects all its instructors to be certified within three years. To reach this goal, NHI is organizing special instructor development courses and offering instructors an extensive list of books, videotapes, and other materials that can be helpful in mastering the required skills.

"In FHWA, we are fortunate to have a wonderfully talented cadre of specialists and technical experts who are willing to teach," said Joseph S. Toole, director of FHWA's Office of Professional Development (OPD), of which NHI is an integral part. "The certification program is not only a means to recognize these employees, but also a chance for them to refine those teaching skills and improve them."

For more information, please contact Ilse van Goth (ilse.vangoth@fhwa.dot.gov) at (703) 235-0529.

Susanne Hughs (703) 235-0540
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NHI master trainer **lise** van Goth (right corner) observes safety engineer William Fitzgerald (Eastern Resource Center) as he prepares to become a certified instructor.

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RD&T launches New IHSDM Web Page

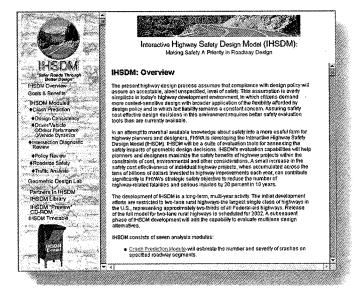
new source for information about FHWA's
Interactive Highway
Safety Design Model (IHSDM)
has made its way on to the
website maintained by FHWA's
Office of Research, Development,
and Technology. Developed by
the Office of Safety R&D, the
IHSDM "microsite" is the largest
and most comprehensive collection of information on highway
safety design models.

The site includes current and thorough descriptions of IHSDM and each of its seven modules. Users can order an IHSDM "Preview" CD-ROM from the site and view a well-organized library that provides links to related research and published articles.

IHSDM will mark a major breakthrough in safe road design by offering highway planners and designers a never-beforeavailable suite of software tools with which to evaluate the safety impacts of design decisions. To find

out more, visit www.tfhrc.gov, and click on IHSDM under What's New.

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The IHSDM "microsite" is the largest and most comprehensive collection of information on highway safety design models.

Panels Select FHWA Fellowship Winners

HWA's Universities and Grants Programs (U&GP) recently convened panels for the 1999 Dwight David Eisenhower Transportation Fellowship Program. These panels review and rank applicants for eventual selection for the following nationally competed awards: the Grants for Research Fellowships (GRF), Graduate Fellowships, and Faculty Fellowships.

Six GRF applications were reviewed in April, and five were recommended for projects. The Graduate Fellowships review panel met in April and ranked 62 applicants based on academic achievements, recommendations, and plans for careers in transportation. The first of two Faculty Fellowship panels met in May. The panel reviewed two applications for the April through October award period. The Eisenhower panels convened locally at 32 participating historically black colleges and universities, hispanic serving institutions, and tribal colleges and forwarded 64 nominations to U&GP for final selection.

In addition to managing the Eisenhower Fellowship Program,

U&GP also provides technical assistance to other transportation education activities including: the National Summer Transportation Institute, Summer Transportation Internship Program for Diverse Groups, University Transportation Centers Program, and Garrett A. Morgan Transportation and Technology Futures Program. To check out U&GP, log on to the NHI website—www.nhi.fhwa.dot.gov—and click on Fellowships and Grants.

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MOTOR CARRIERS

Secretary Rodney E. Slater Announces Plan to Reduce Truck-Related Deaths

T.S. Secretary of
Transportation Rodney
E. Slater and Federal
Highway Administrator Kenneth
Wykle announced a safety action
plan that combines stronger
enforcement, tougher penalties,
new regulations, advanced
technology, and education and
research to reduce the number of
deaths on the Nation's highways
associated with commercial
vehicles.

Slater and Wykle also announced a long-range goal of reducing these fatalities by 50 percent over 10 years through a comprehensive effort involving these and other measures to be developed by governmental, safety and industry authorities.

Key components of an immediate safety action plan include:

- Enacting new rules providing the authority to shut down unfit carriers.
- Significantly increasing the fines for safety violations, limiting negotiated settlements or "wristslaps," and eliminating the current backlog of enforcement cases by the end of the year.
- Doubling the number of compliance reviews each month for safety

investigators. This means an annual increase per inspector from 24 to 48.

- Completing a final rule on hours of service.
 The department will actively engage all interested and affected parties inthe process of achieving this goal.
- Where deaths take place in a crash, aggressively pursuing criminal or civil action, when warranted.

 Disqualifying drivers who disregard railroad grade crossing warnings from driving commercial vehicles (to be

completed by this summer).

Slater also announced that the administration has amended its FY 2000 budget request, asking Congress to provide an additional \$55.8

million for the effort.

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h new motor carrier plan emphasizes stronger enforcement, tougher penalties, new regulations, advanced technology, and education and research.

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PAVEMENTS

LTPP Publishes 1998 Year in Review

o keep its partners apprized of the program's successes and challenges in 1998, the Long Term Pavement

Long Term Pavement
Performance (LTPP)
program recently
published *LTPP* 2998
Year in Review. Nineteen
ninety-eight proved to
be both a productive
and challenging year for
LTPI? LTPP introduced
several new products,
initiated the next phase of its
Data Resolution effort, and
completed several data analysis
projects.

The new 12-page document provides an overview of the program's 1998 accomplishments

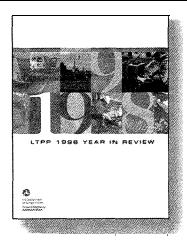
along with key initiatives the program will be

pursuing in 1999. It also features an LTPP
Milestone Chart that graphically depicts the program's history since its inception in the

1980s. For a copy, contact the following.

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The *LTPP Year in Review* is available. Please call (202) 493-3142 to order a copy.

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